DTIC's Handle Service and YOU!

s. Barbara Nekoba
Information Science and Technology Directorate

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Bookmarks Location: http://www.prism.cornell.edu/frames/frame_w_intro.htm What's Related

HTTP Error 404

404 Not Found

The Web server cannot find the file or script you asked for. Please check the URL to ensure that the path is correct.

Please contact the server's administrator if this problem persists.

Start Inbox - Mic... Error 40... Re: MOUT... Microsoft ... Untitled - ... RE: DVL - ... Validation ... 11:49 AM

DTIC's Handle Service

DTIC's Project:

To provide for the persistent identification and management of DOD resources available on the Internet

- to provide a way to preserve all DoD electronic resources that have long-term value
- to provide actionable links to DoD resources from one central location

DTIC's Handle Service

What is a Persistent Identifier?

100.2/ADAXXXX

Trends

- WWW now contains over 7.1 million unique sites
- Many resources no longer published in hardcopy
- Increasing preference for online access to digital materials
- Identifying, organizing, managing online content adds level of complexity
- Danger of 'digital gap' is real

The Problem: URLs

- URLs are location devices - not identifiers

HTTP Error 404

- Resource may have been removed
- Resource may have been moved
- Resource may have been renamed

- Great way to share information; terrible way to manage information

The Solution: URNs

- IETF has proposed adoption of Uniform Resource Names (URNs)
- URN characteristics:
  - Global uniqueness -- Extensibility
  - Persistence   -- Scalability
  - Location Independence   -- Resolution
  - Legacy support
- URNs resolve to URLs

Resolution - Wouldn't it be great if...

Resource Manager

Email Address

Local Address

Local Phone Number
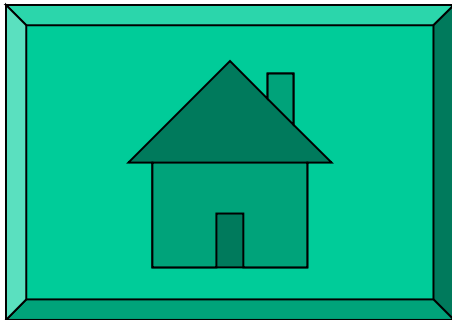
DTIC = DOD Resource Manager

Practical Decisions

- Determine identifier scheme (ISBN, ISSN, UPC)

- Choose identification system (PURL, DOI/CrossRef, PII, NBN)

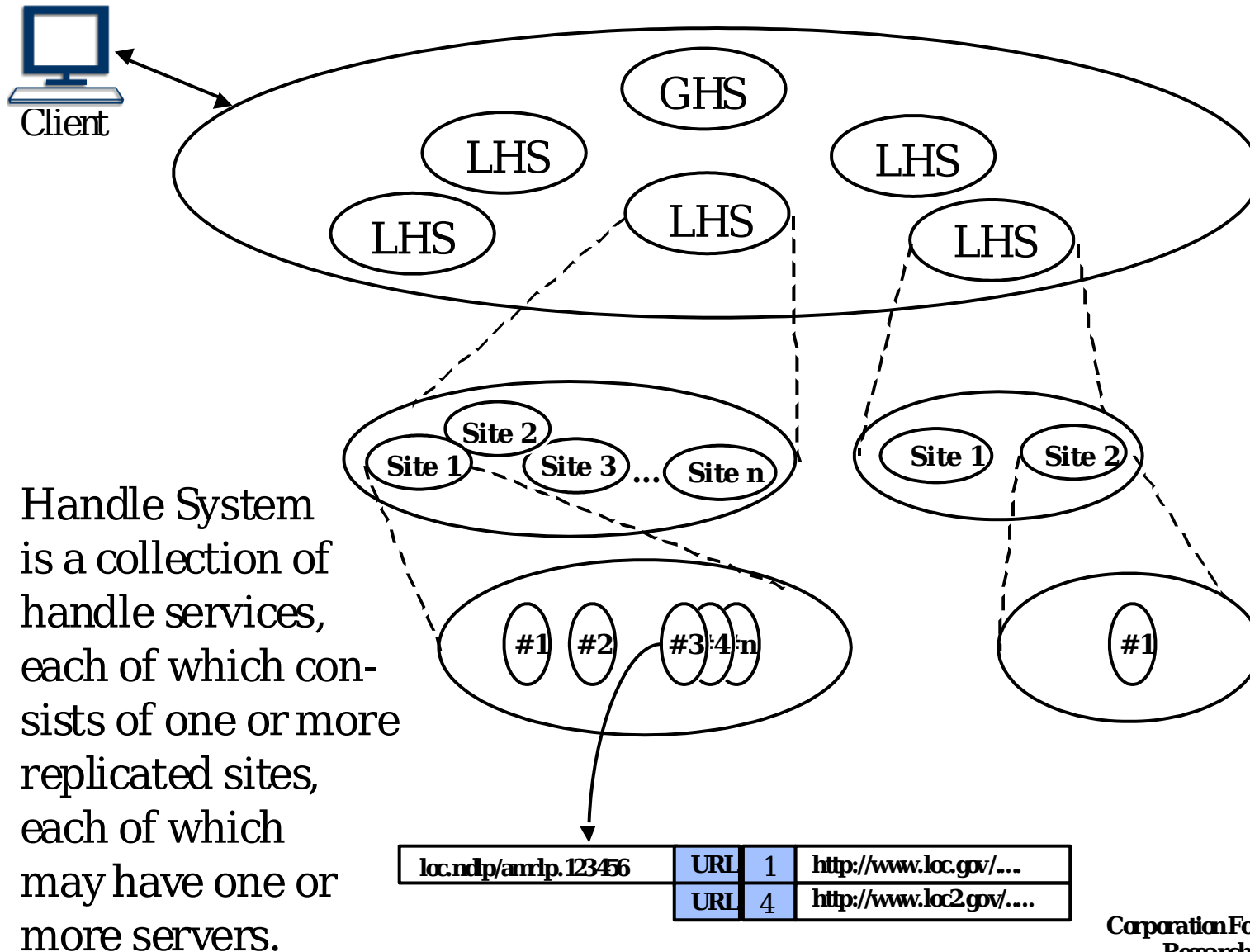- Handle System® meets all URN specifications

What is a Handle?

100.2/ADAXXXX

Naming
Authority
Prefix

Item ID
Suffix

Handle Resolution

Client

GHS

LHS

LHS

LHS

LHS

LHS

Site 1
Site 2
Site 3
...
Site n

Site 1
Site 2

#1 #2 #3 #4 n

#1

Handle System is a collection of handle services, each of which consists of one or more replicated sites, each of which may have one or more servers.

loc.ndlp/amrlp.123456	URL	1	http://www.loc.gov/...
	URL	4	http://www.loc2.gov/...

Corporation For National Research Initiatives
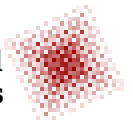
DTIC's Handle Service

DTIC's new Handle Service

- Uses Handle System® technology
- Uses Oracle database
  - Handle storage, administration
  - Metadata storage, administration
- Includes Handle Search Directory
- WebObjects software
- Uses Proxy URL

DTIC's Handle Service

To Access a Handle from a Browser**:**

HttpProtocol+ProxyURL+Handle =

http://handle.dtic.mil/100.2/ADA375124

protoc
ol

Proxy
URL

Handl
e

This will resolve to the actual URL:

Http://stinet.dtic.mil/cgi-bin/fulcrum_main.pl?
database=ft_u2&searchid=0&keyfieldvalue=ADA37
5124&filename=%2Ffulcrum%2Fdata
%2FTR_fulltext%2Fdoc%2FADA375124.pdf

DTIC Handle Storage and Administration Using Oracle Database

Process Deposits Handles in DTIC LHS

Handle Resolution

Authentication

DTIC Local Handle Service

Handle Loading

Oracle Database for Handle Storage, Administration and Metadata

SQL Queries for Reports

Handle System

Proxy Server handle.dtic.mil

Batch Process

Web Form for Handle creation

Handle Query Using Web Browser

DTIC's Handle Service

ProxyURL & Handle Embedded in STINET Citation
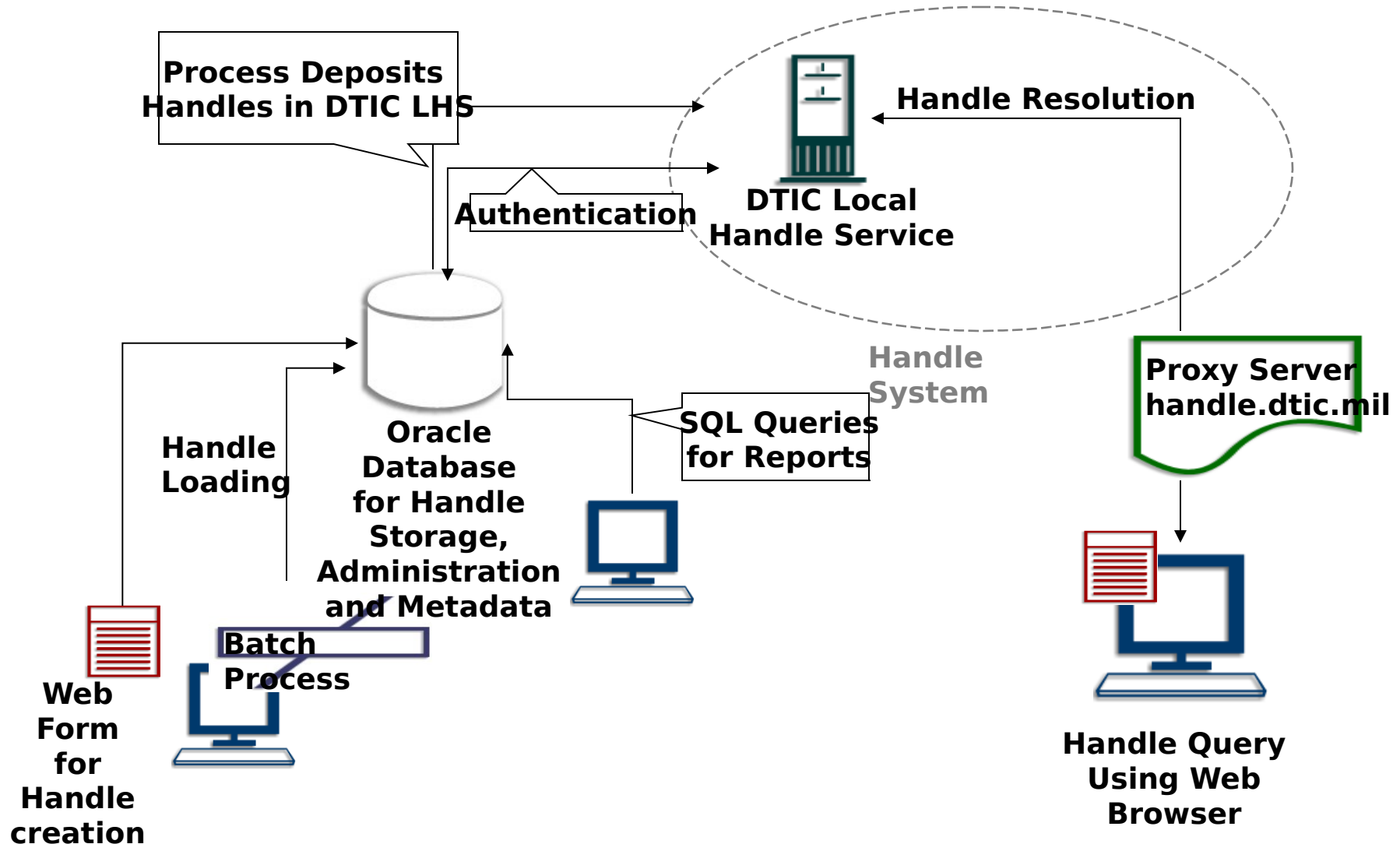
STINET - Fluctuations of Starlight and Skylight - Netscape

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Bookmarks Netsite: 0&keyfieldvalue=ADA375124&filename=Ffulcrum%2Fdata%FTR_fulltext%Fdoc%2FADA375124.pdf What's Related

(This is hit 1 of 1.)

AD Number: **AD000014**
ProxyURL/Handle: http://handle.dtic.mil/100.2/**AD000014**
Subject Categories: ATMOSPHERIC PHYSICS
Corporate Author: OHIO STATE UNIV RESEARCH FOUNDATION COLUMBUS
Title: Fluctuations of Starlight and Skylight
Descriptive Note: Progress rept. 1 Oct-31 Dec 51
Personal Authors: Hynek, J. Allen
Report Date: 15 MAR 1952
Pages: 18 PAGES
Report Number: OSURF-1
Contract Number: AF 19(604)-41
Monitor Acronym: XC
Monitor Series: ESC*
Limitations: Approved for public release; distribution unlimited.
Descriptors: *STARLIGHT, MEASUREMENT, ILLUMINATION, VISIBILITY, ASTRONOMY, NEAR INFRARED RADIATION, TELESCOPES.
Abstract: Studies are to be made on the fluctuations in small areas of daytime sky, the quality of scattered blue daylight sky, and the extension of daytime and nighttime astronomical seeing to the near infrared. A photoelectric photometer was designed to make a permanent record of the behavior of areas observed by the 12.5-in. refracting telescope. The photometer uses a 1P21 photomultiplier tube, and has interchangeable filters and diaphragms and a solid CO2-cooled tube chamber. Illumination patterns of the 69-in. mirror of the 104- ft. focal-length Perkins Observatory reflecting telescope are being studied to obtain information about the manner in which daytime starlight illuminates the mirror. A literature survey of previous work on astronomical seeing is being conducted.
Limitation Code: APPROVED FOR PUBLIC RELEASE
Source Code: 267360

DTIC's Handle Service

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Welcome to the DTIC Handle Service.

Is the information you need here today and gone tomorrow? Are you tired of getting "Error 404" messages? DTIC has a solution.

DTIC's Handle Service assigns permanent names called "handles" to electronic resources, and stores them in its Handle Service. The current location (or URL) where the resource can be found is stored with each handle. When the location changes, the handle record is updated to reflect this change, and there is no broken link. DTIC's Handle Service also facilitates the preservation and long term access to electronic resources, ensuring their availability over time and changing data formats. DTIC's Handle Service will play a vital role in preservation of DOD's Internet-accessible resources.

Handles are assigned to online DOD resources -- currently to DTIC's full text, publicly-releasable technical reports available on the Internet via the Scientific and Technical Information Network (STINET) and Web-Enabled DROLS (WED) systems. These are stored in a central directory users can search to instantly retrieve needed information. To see handles in action, visit Search to query the collection. Read through the Handle FAQs to learn all the facts, and read about how DTIC will partner with interested DOD organizations to create handles for their resources and take advantage of the opportunity to preserve their published works. Visit Related Links for articles about DTIC's Handle Service and link to other organizations that use handles. See The Handle System web site for an explanation on the technology underlying DTIC's Handle Service.

Document: Done

Start | Inbox - Microsoft Outlook | Welcome to the D... | Microsoft PowerPoint - ... | RE: AV Requirements f... | 8:17 AM

DTIC's Handle Service

Handle Search Directory

- **Provides access to <u>all</u> handles on the Web**

- **Is a handle discovery tool for DOD resources**
  - provides direct links to resources
  - Provides centralized access to all DOD DOD handles

Metadata Supports Resource Discovery

- If you can't find it you can't use it
- Metadata essential to identify a resource
- Metadata called the great unifier - many schemas; e.g., Dublin Core, MARC, <indecs> , SCORM, XMP

DTIC's Metadata Schema

- Title
- Report Number
- DTIC AD Number
- Corporate Author
- Personal Author
- Publication Year

DTIC's Handle Service

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Handle FAQs

- What is a handle?
- What is a Uniform Resource Name (URN)?
- What is the Handle System® ?
- What does a handle look like?
- How is a handle different from a URL?
- What is the purpose of the proxy server/proxy URL? Why do I need it?
- How are handles resolved?
- How can handles benefit the researcher and the publisher?
- Will I really be able to retrieve an electronic resource by its handle 10 years from now?
- Can I search for a handle via STINET or WED?
- How is a handle cited in a bibliography?
- How can my organization become involved? Is there a cost?
- What is the purpose of the Handle Search page?
- What is the purpose of the metadata?
- What metadata is required?

DTIC's Handle Service

What Does This Mean to the Customer?

- Preserves access to valuable electronic resources

- Enables reference/citation linking

- Centralizes access to DOD data

- Allows creation of accurate, long-term 'living' bibliographies

Citing Handles in a Bibliography

Basic format:

> **Author's Last Name, Initial(s)**
>
> **Date of Document**
>
> **Title of Document. Title Complete Work (if applicable)**
>
> **Edition or Revision (if applicable)**
>
> **Protocol, access path, handle (prefix + suffix)**

Example:

Barth, Perry E. 10 April 2000. Countering the Biological Weapons Threat to the Homeland http://handle.dtic.mil/100.2/ADA378197

What Does This Mean to the Contributor?

- Preserves digital publications in perpetuity

- Guarantees immediate access to publications, 24x7

- Relieve contributor of many resource management, manpower, maintenance, storage, licensing and equipment costs

Our Contributors Will Have Choices

- Option 1: Maintain status quo
  - Submit resources to DTIC; DTIC assigns handles and metadata, performs all processing actions
  - DTIC will ensure permanence (availability and content)

- Option 2: Become a DTIC partner

- Option 3: Transfer resources to DTIC if Option 2 is no longer feasible

DTIC's Handle Service

Partnering with DTIC

- Receive a unique naming authority under DTIC sponsorship (handle prefix)

- Create own handles, maintain own resources

- Submit metadata, handles and URLs to DTIC (DTIC will provide mechanisms and procedures for data submission)

- Additional support will be required
  - Must adhere to DTIC policies/procedures
  - Notify DTIC when URLs change

DTIC's Role

- Resource manager
- Provide leadership to DOD community
- Support customers/partners
  - Provide policies, procedures, guidance
  - Reach out - educate, train
  - Maintain hardware, software, licenses
  - Manage data, metadata
- Track new initiatives, developments
- Build new enhancements as needed

DTIC's Handle Service

Where We Are Now

– Implemented handles into DTIC operations

– Assigned handles to all DTIC's publicly releasable fulltext .pdf resources

– Built structure to create, manage, resolve handles for DOD electronic resources from remote locations

– Established metadata policies/procedures

– Enabled reverse lookup/reference linking capabilities

DTIC's Handle Service

What are Next Steps?

- Assign handles to restricted access resources (Limited/FOUO)

- Create technical transfer capabilities for partners (metadata, handles, URLs)

- Enhance handle search capabilities (more Google-like)

- Create multiple resolution capabilities

- Create handle templates for additional genres; e.g., journals, technical manuals, multimedia

DTIC's Handle Service and YOU!

Persistence is Golden

- to ensure existence of valuable online digital materials
- to ensure identification of digital materials
- to ensure long-term access to digital materials

DTIC's Handle Service

- Visit the DTIC Handle Service at:

    http://www.dtic.mil/dtic/handles/

Let us know the Handle Service can best serve your needs
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